

Consultation

Enhancing asset visibility: central asset register proposals

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This consultation builds on our December 2025 consultation on enhancing asset visibility.¹ In that consultation, stakeholders broadly supported intervention to improve asset visibility and expressed a preference for a more centralised approach. This consultation sets out Ofgem's proposed framework for a Central Asset Register (CAR), the shortlisted delivery options, and Ofgem's emerging position on the preferred delivery model.

We are also publishing a draft Impact Assessment alongside this consultation and welcome feedback on the evidence, assumptions and analysis it contains. Consultation responses and impact assessment evidence will inform Ofgem's final decision on the delivery of CAR.

We particularly welcome responses from regulated parties including Distribution Network Operators (DNOs), the National Energy System Operator (NESO), Elexon, and Flexibility Service Providers (FSPs). We would also welcome responses from other stakeholders and the public.

¹ [Enhancing asset visibility: Distribution Network Operator options | Ofgem](#)

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Executive summary

In December 2025, we consulted on whether intervention was needed to improve asset visibility. We proposed a range of delivery options, from no intervention and decentralised arrangements through to centralised solutions.² Stakeholders strongly supported intervention, highlighted the importance of a centralised approach to asset visibility, and emphasised the need to build on existing infrastructure where possible.

In light of this feedback, this consultation focuses on two existing-platform delivery options for a Central Asset Register (CAR): an Elexon Flexibility Market Asset Registration (FMAR)-based delivery option, which builds on a platform currently under development, and an ElectraLink EMPRIS-based delivery option, which builds on an existing operational platform.

Based on the available evidence, our minded-to position is that an ElectraLink EMPRIS-based approach appears to provide the strongest overall delivery option for a CAR. This reflects its relative delivery readiness, building on an existing operational platform, and greater confidence in the underlying delivery assumptions, cost estimates and implementation approach.

Improving asset visibility is important as the deployment of Consumer Energy Resources (CERs) and Distributed Energy Resources (DERs) continues to increase. Consistent with the scope consulted on previously, this work focuses on assets under 1MW, particularly those below 50kW where visibility gaps are greatest. While asset data is stored, shared and accessed through a range of existing processes and systems, information remains fragmented, inconsistent and incomplete, limiting its usefulness for planning, operational and policy decision-making.

We consider that a CAR would provide a more complete, consistent and trusted view of assets across Great Britain. By improving how asset data is stored, reconciled, shared and accessed, a CAR would help establish a Single Source of Truth (SSOT) for asset information, strengthen the evidence base for decision-making, and provide a scalable foundation for future energy system needs. A CAR would also operate alongside related initiatives, including Elexon's Flexibility Market Asset Registration (FMAR) platform, which is being developed to support asset registration within flexibility markets.

This work is a core part of a broader strategy to improve asset visibility, set out by DESNZ in their December 2025 call for evidence response.³ DESNZ is progressing reforms intended to improve the collection of asset information at installation, including their intention to progress primary legislation to clarify installer obligations, and their sponsorship of industry work, led by ENA and MCS, to streamline installer registration. A CAR would build on these arrangements by providing enduring arrangements for storing, reconciling, sharing and accessing asset data once collected. Alongside this, related initiatives, including FMAR and wider digitalisation activities, are

² [Enhancing asset visibility: Distribution Network Operator Options](#)

³ [Improving the visibility of distributed energy assets: government response](#)

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intended to help ensure that high-quality asset information can be used effectively across the energy sector.

Together, these initiatives support an end-to-end approach to asset visibility, in which information is collected, maintained and made available through a more coordinated and interoperable framework. We are working closely with DESNZ to drive these projects forward together and in full alignment.

CAR would form part of the wider digitalisation architecture established through the Energy Digitalisation Framework (EDF).⁴ Under this framework, Elexon has been assigned as Domain Coordinator for the behind-the-meter asset domain and is expected to support the development of asset data standards and interoperability arrangements relevant to CAR.

To support assessment of delivery options, we have developed a framework for a CAR comprising:

- The outcomes a CAR should support;
- The priority use cases it should enable;
- The design principles it should follow;
- The minimum functional requirements it should provide; and
- The assessment criteria used to compare delivery options.

We have assessed these two delivery options against criteria covering:

- Delivery
- Technical capability
- Interoperability
- Governance and trust
- Value for money and cost recovery
- Stakeholder coordination and engagement

As part of this consultation, we are also publishing a draft impact assessment and invite stakeholder feedback on the evidence and assumptions it contains. Consultation responses, impact assessment evidence and further stakeholder engagement will inform Ofgem's final assessment and decision on the preferred delivery model. Subject to this evidence, Ofgem currently expects to take a final decision in Spring 2027 and publish a final impact assessment alongside that decision.

⁴ [Energy digitalisation framework: a vision for a coordinated and connected energy system - GOV.UK](#)

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1. Introduction

Section summary

This section outlines the structure and context of this consultation. It outlines the purpose of this consultation and provides guidance on how to respond.

Purpose of this consultation

- 1.1 We are consulting on our proposals to improve asset visibility through the introduction of a Central Asset Register (CAR). We set out the proposed framework for a CAR, the two shortlisted delivery options, and the assessment criteria that will inform our final decision.

Context and related publications

- 1.2 The number of consumer energy resources (CERs) and distributed energy resources (DERs), including electric vehicle chargers, rooftop solar and heat pumps, is expected to continue increasing significantly as Great Britain transitions towards a smarter, more flexible energy system. As asset volumes grow; access to accurate, complete, and consistent information about those assets becomes increasingly important for planning, operational, and policy decision-making across the energy sector.
- 1.3 However, visibility of assets remains incomplete. Asset data is currently collected, stored, and shared through a range of processes, systems and regional arrangements. As a result, information is often fragmented, inconsistent and spread across multiple datasets. This can make it difficult for network operators, policymakers and other authorised users to develop a complete and consistent understanding of assets across the energy system. As asset volumes continue to grow, these challenges are likely to become more pronounced.
- 1.4 In our December 2025 consultation, stakeholders broadly supported the case for intervention and highlighted the importance of improving asset visibility through a more coordinated, centralised and interoperable approach.⁵ Stakeholders also emphasised the need to build on existing infrastructure where possible, avoid duplication and ensure alignment with wider digitalisation initiatives.
- 1.5 Since then, work has continued across government and industry to improve asset visibility. This includes DESNZ's asset visibility and installer notification reforms.⁶ These reforms are intended to improve the collection of asset information at

⁵ [Enhancing asset visibility: Distribution Network Operator options | Ofgem](#)

⁶ [Improving the visibility of distributed energy assets: government response](#)

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installation, including through updated installer notification arrangements, proposals relating to potential future installer obligations, and support for industry-led work by the ENA and MCS to develop a single point of notification minimum viable product (MVP).

- 1.6 Alongside this, wider initiatives relating to flexibility markets, digitalisation and data sharing continue to evolve within the broader digitalisation landscape established through the Energy Digitalisation Framework (EDF), including the Flexibility Market Asset Registration (FMAR) platform, Data Sharing Infrastructure (DSI) and Consumer Consent Service (CCS).⁷ Together, these initiatives are intended to support a more coordinated, interoperable and data-driven energy system. While these developments should improve the collection of asset data and support wider digitalisation objectives, questions remain regarding how that data should subsequently be stored, reconciled, shared and made accessible across the wider energy system.
- 1.7 This consultation therefore considers proposals for a CAR as a means of improving asset visibility within the wider digitalisation landscape. It sets out a proposed framework for a CAR, the two delivery options identified for its implementation, and the assessment criteria that will be used to evaluate those options.

Overview

Section 1 – Introduction

- 1.8 Section 1 introduces the purpose and scope of this consultation, explains how it relates to previous work on asset visibility, and provides information on how to respond.

Section 2 – Results from our previous consultation

- 1.9 Section 2 summarises stakeholder feedback from Ofgem's previous asset visibility consultation and explains how consultation responses have informed the development of the proposals set out in this document.

Section 3 – What is a CAR and why is it needed?

- 1.10 Section 3 explains the asset visibility challenges facing the energy system, the case for intervention, and why Ofgem considers a CAR could provide an enduring solution.

⁷ [Energy digitalisation framework: a vision for a coordinated and connected energy system \(accessible webpage\) - GOV.UK](#)

Consultation Enhancing asset visibility: central asset register proposal**Section 4 – Landscape – Current and future**

- 1.11 Section 4 considers how a CAR fits within the wider asset visibility and digitalisation landscape established through the Energy Digitalisation Framework (EDF), including its relationship with Domain Coordinators, DESNZ reforms, FMAR, DSI, Consumer Consent and other related initiatives.

Section 5 – Our framework for a CAR

- 1.12 Section 5 sets out Ofgem's proposed framework for a CAR, including the outcomes, use cases, design principles and minimum functional requirements that a CAR should support.

Section 6 – Delivery options for the CAR

- 1.13 Section 6 explains how Ofgem proposes to assess delivery options for a CAR, presents the shortlisted delivery routes, and sets out Ofgem's minded-to position regarding the preferred approach.

Section 7 – Delivery option assessment

- 1.14 Section 7 assesses the two shortlisted delivery options for a CAR against the proposed assessment criteria, compares their relative strengths and weaknesses, and sets out Ofgem's minded-to position on the preferred delivery model.

Section 8 – Conclusion and next steps

- 1.15 Section 8 summarises the proposals set out in this consultation and explains how consultation responses, impact assessment evidence and further engagement will inform Ofgem's final assessment and next steps.

Consultation stages

Stage 1 Consultation open: 12 October 2026

Stage 2 Consultation closes: 7 December 2026

Stage 3 Responses reviewed and published: Q1 2027

Stage 4 Consultation outcome (decision): Spring 2027

How to respond

We want to hear from anyone interested in this consultation. Please send your response to the flexibility@ofgem.gov.uk

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We have asked for your feedback in each of the questions throughout. Please respond to each one as fully as you can.

We will publish non-confidential responses on our website.

Your response, data, and confidentiality

You can ask us to keep your response, or parts of your response, confidential. We will respect this, subject to obligations to disclose information. For example, under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations, or where you give us explicit permission to disclose. If you do want us to keep your response confidential, please clearly mark this on your response and explain why.

If you wish us to keep part of your response confidential, please clearly mark those parts of your response that you do wish to be kept confidential and those that you do not wish to be kept confidential. Please put the confidential material in a separate appendix to your response. If necessary, we will contact you to discuss which parts of the information in your response should be kept confidential and which can be published. We might ask for reasons why.

If the information you give in your response contains personal data under the General Data Protection Regulation (Regulation (EU) 2016/679) as retained in domestic law following the United Kingdom's withdrawal from the European Union ("UK GDPR"), the Gas and Electricity Markets Authority will be the data controller for the purposes of GDPR. Ofgem uses the information in responses in performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. Please refer to our Privacy Notice on consultations, see Appendix 4.

If you wish to respond confidentially, we will keep your response confidential, but we will publish the number, but not the names, of confidential responses we receive. We will not link responses to respondents if we publish a summary of responses, and we will evaluate each response on its own merits without undermining your right to confidentiality.

How to track the progress of a consultation

1. Find the web page for the call for input you would like to receive updates on.
2. Click 'Get emails about this page', enter your email address and click 'Submit'.
3. You will receive an email to notify you when it has changed status.

A consultation has three stages: 'Open', 'Closed (awaiting decision)', and 'Closed (with decision)'.

2. Results from our previous Consultation

Section summary

This section summarises stakeholder feedback from Ofgem's previous asset visibility consultation and explains how consultation responses have informed the development of the proposals set out in this document.

Introduction

- 2.1 In December 2025, we published a consultation on enhancing asset visibility, which sought views on whether regulatory intervention was needed to improve visibility of assets and how any enduring solution should be delivered. The consultation focused on improving visibility of static registration data for Consumer Energy Resources (CERs) and Distributed Energy Resources (DERs) under 1MW (referred to as assets) and explored different approaches to storing and sharing asset data across the energy system.
- 2.2 We asked stakeholders to provide views on four broad delivery options:
- Option 1 – No intervention
 - Option 2 – Multiple standardised DNO registers
 - Option 3 – Creation of a new central DNO asset register
 - Option 4 – Expansion of an existing or emerging industry platform.

Views from industry and respondents

- 2.3 We received 33 responses to our December consultation, comprised of all 6 DNOs, ElectraLink, Elexon, NESO, ENA, 2 flexibility service providers, 2 IDNOs, 3 innovators, 2 software platforms, 4 suppliers/generators, 3 trade associations and 7 other organisations.
- 2.4 31 out of 33 respondents answered our question as to whether there was a case for change and that policy intervention is needed for DNO asset registration. Of these 31 respondents, 25 (81%) agreed, and 6 (19%) partially agreed, demonstrating very high support.
- 2.5 Stakeholders generally supported the proposed scope of the intervention. Of the 30 out of 33 respondents who answered this question, 19 (63%) agreed and 11 (37%) partially agreed, with no respondents disagreeing. Respondents broadly supported the focus on small-scale DERs and CERs under 1MW, including the priority focus on assets below 50kW where visibility gaps are currently greatest.

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While some stakeholders suggested refinements relating to asset types, lifecycle information, dynamic data and future scope expansion, there was broad support for initially focusing on improving visibility of smaller assets not comprehensively captured through existing arrangements.

- 2.6 29 respondents gave a preference for a delivery approach, of whom 23 (79%) supported a centralised solution (options 3 and 4). Among those who expressed a delivery body preference, 11 preferred Elexon, 7 preferred ElectraLink, and 1 supported both.
- 2.7 Support for ElectraLink generally came from DNOs and DNO-related organisations. These respondents typically highlighted ElectraLink's existing relationships with DNOs and its experience delivering industry data services and platforms.
- 2.8 Support for Elexon through FMAR was spread across market participants, suppliers, generators, flexibility service providers and trade bodies, rather than being concentrated within a single stakeholder group. Respondents supporting this approach generally highlighted the potential benefits of aligning asset visibility arrangements with flexibility market registration and wider digitalisation initiatives.
- 2.9 Respondents expressed concerns with Elexon delivering FMAR and CAR simultaneously, stating that doing so could add complexity or delay FMAR. Of the 12 respondents who supported Elexon (including one who also supported ElectraLink), one preferred FMAR and CAR to be delivered simultaneously (Option 4a), while the remainder either preferred FMAR to be delivered before CAR (Option 4b), or supported alternative FMAR-based approaches.

Feedback: emerging themes

- 2.10 Consultation responses demonstrated a clear preference for a centralised approach to improving asset visibility, which respondents generally viewed as the most effective means of improving consistency, reducing fragmentation and supporting interoperability across the energy system. Stakeholders also consistently emphasised the importance of building on existing and developing infrastructure and avoiding unnecessary duplication.
- 2.11 Several respondents identified existing platforms, capabilities or delivery bodies as the preferred means of implementing a CAR, including through an expansion of ElectraLink's EMPRIS platform and Elexon leveraging FMAR.

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Feedback: concerns raised

- 2.12 While respondents generally supported intervention, many emphasised the need for a robust assessment of costs, benefits and value for money before a final delivery model is selected, including on expected consumer and system benefits and implementation costs.
- 2.13 Respondents also raised concerns regarding delivery timescales and implementation risk. Several stakeholders requested greater clarity on implementation plans, dependencies and delivery timelines, whilst emphasising the importance of avoiding unnecessary complexity and minimising the risk of delays to related industry initiatives.
- 2.14 Stakeholders highlighted the importance of common data standards, governance arrangements and interoperable processes across asset visibility initiatives. Respondents generally viewed these as prerequisites for reducing duplication, supporting effective data sharing and providing clear accountability for delivery and decision-making. Several respondents also sought greater clarity regarding the respective roles of Ofgem, DESNZ, industry participants and any future delivery body.
- 2.15 Respondents also highlighted the importance of improving data quality, addressing gaps in legacy asset data and ensuring asset visibility arrangements remain adaptable as use cases evolve over time.

How responses have informed this consultation

- 2.16 Building on consultation responses, this consultation focuses on the role that a CAR could play in storing, reconciling, sharing and accessing asset information across the energy system. It assesses two delivery options: an ElectraLink EMPRIS-based approach and an Elexon FMAR-based approach.
- 2.17 Many respondents emphasised the need for further evidence on costs, benefits, deliverability and value for money before a final delivery model is selected. To address these concerns, Ofgem has published a draft impact assessment alongside this consultation and invites stakeholder feedback on the evidence and assumptions it contains. Consultation responses, impact assessment evidence and further stakeholder engagement will inform our final assessment and decision.
- 2.18 Stakeholders also highlighted the importance of alignment with related initiatives and clarity regarding governance, accountability and implementation arrangements. This consultation therefore considers how a CAR could align with DESNZ asset visibility reforms, FMAR and wider energy digitalisation initiatives.

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3. What is a CAR and why is it needed?

Section summary

This section explains why improving asset visibility remains important, the challenges presented by current arrangements, how a CAR could address them, and why Ofgem is focusing assessment on centralised delivery options.

The asset visibility problem

- 3.1 The transition to a smarter, more flexible energy system is expected to drive significant growth in the number of assets across Great Britain. Consumer Energy Resources (CERs) and Distributed Energy Resources (DERs), including electric vehicle chargers, rooftop solar, battery energy storage systems and heat pumps, are expected to play an increasingly important role in supporting system flexibility, decarbonisation and consumer participation in energy markets. For example, NESO's Future Energy Scenarios (2025) indicate that the number of EVs on the road could rise from less than 1.5 million to nearly 10 million by 2030 and up to 35 million by 2050, and the number of heat pumps could rise from less than 0.5 million to around 2 million by 2030 and up to 24 million by 2050.⁸
- 3.2 As deployment increases, access to accurate, complete and consistent asset information becomes increasingly important. However, visibility of assets remains incomplete. Asset information is currently collected, stored and shared through a range of organisations, systems and regional arrangements, resulting in fragmentation, inconsistencies and gaps in coverage. DNOs have indicated that less than half of small-scale distributed energy assets are currently registered with them.⁹ As a result, it can be difficult to establish a complete and consistent view of assets across Great Britain, particularly for smaller assets where visibility gaps are greatest.
- 3.3 As asset volumes continue to grow, maintaining multiple disconnected datasets and visibility arrangements is likely to become increasingly complex. The challenge is therefore not simply collecting more asset data but ensuring that asset information can be managed and used consistently across the energy system.

⁸ [FES Documents | National Energy System Operator](#)

⁹ [Improving the visibility of distributed energy assets: call for evidence - GOV.UK](#)

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Why asset visibility matters

- 3.4 Improving asset visibility is not an end in of itself. The objective is to ensure that authorised users across the energy system have access to reliable and consistent asset information when making planning, operational and policy decisions.¹⁰
- 3.5 Network operators, planners, policymakers and other authorised users rely on asset visibility to understand how assets are being deployed, assess future network needs, evaluate policy impacts and support wider energy system planning. Improved asset visibility therefore has the potential to support a range of planning, operational and policy use cases. These use cases are discussed further in Section 5.

Why intervention is justified

- 3.6 Effective asset visibility depends not only on collecting asset data, but also on ensuring that it can be stored, reconciled, shared and accessed consistently across the energy system. Where organisations maintain separate datasets and processes, it becomes more difficult to establish a common and reliable view of assets.
- 3.7 DESNZ's installer notification reforms and proposals relating to potential future installer obligations are intended to improve the collection, completeness and quality of asset information at source. However, questions remain regarding how that data should subsequently be stored, reconciled, shared and made accessible across the wider energy system. This consultation therefore considers how those challenges could be addressed through a CAR.
- 3.8 Responses to our previous consultation supported the case for intervention, and no respondents disagreed that action was needed. Stakeholders highlighted the importance of common standards, governance arrangements and interoperable processes as prerequisites for reducing fragmentation, avoiding duplication and supporting effective data sharing across the energy system. Many respondents also considered that centralised approaches were well placed to deliver these outcomes through a more coordinated view of asset information and the creation of a SSOT.
- 3.9 Ofgem therefore considers that intervention is justified. However, any intervention should be proportionate, evidence-led and focused on delivering clear user and system value. The accompanying draft Impact Assessment provides further

¹⁰ Authorised users are organisations or individuals that have been granted appropriate access to asset information in accordance with applicable governance, security and access arrangements.

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assessment of the expected costs and benefits associated with introducing a CAR.

Why a CAR is justified

- 3.10 While improvements to individual DNO asset registers could improve visibility within each network area, they would not provide a common view of asset information across Great Britain. In light of consultation responses and further policy development, Ofgem considers that future assessment should focus on centralised delivery approaches.
- 3.11 A CAR would provide a common national capability for storing, reconciling, sharing and accessing asset information across Great Britain. By bringing together asset information spread across multiple datasets within a common framework, it would establish a more complete, consistent and trusted view of assets, help establish a SSOT for asset information, and improve data quality through the validation and reconciliation of records from different sources.
- 3.12 By improving the availability, consistency and accessibility of asset information, a CAR would strengthen the evidence base for planning, operational, policy and market-related decisions across Great Britain.

International examples of CARs

- 3.13 Several countries have introduced, or are developing, arrangements to improve asset visibility. While these approaches differ in scope, governance and implementation, they demonstrate common themes, including mandatory asset registration, standardised data, interoperability between organisations and centralised access to asset information.

Australia – AEMO DER Register

- 3.14 Australia's Energy Market Operator (AEMO) maintains a Distributed Energy Resources (DER) Register to improve visibility of DERs, particularly rooftop solar and battery systems, as deployment has increased across Australia.¹¹ The register provides a centralised source of standardised asset information that supports network planning, operational awareness, load forecasting and broader power system management. Registration of in-scope DER assets is mandatory and forms part of established industry processes.
- 3.15 Asset information is captured through existing installation, commissioning and network connection arrangements. Installers submit technical asset information,

¹¹ [AEMO | About the DER Register](#)

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which is reviewed and validated through network service provider processes before being incorporated into the national register. The register is then maintained through ongoing updates as assets are commissioned, modified or decommissioned.¹²

Germany – Marktstammdatenregister

- 3.16 Germany's Federal Network Agency, the Bundesnetzagentur, operates the Marktstammdatenregister (MaStR) as a central register for the electricity and gas market.¹³ The register was introduced to provide a comprehensive, uniform and reliable data basis for the energy sector, particularly as the electricity system has become increasingly characterised by large numbers of small and very small generation assets. MaStR contains master data on electricity and gas market actors and energy assets, including renewable and conventional generation, storage and large consumption assets.
- 3.17 Registration in MaStR is mandatory for relevant operators and market actors. Operators are required to register themselves, enter their asset data and keep that information up to date. Network operators also have responsibilities to review and supplement asset and operator data. By bringing together information that was previously captured in different and uncoordinated registers, MaStR is intended to simplify reporting obligations, reduce duplication and improve the quality of energy-sector master data.
- 3.18 MaStR is publicly accessible, subject to confidentiality protections. Public access supports wider use of registered energy data, while personal data and certain location data are protected. Confidential data can be made available to specified actors, including the regulator, network operators and certain authorities, where needed for statutory functions.

Learnings

- 3.19 Across Australia and Germany, a common theme is that effective asset visibility depends on the collection, maintenance and governance of asset data operating together within a coordinated framework.
- 3.20 Both examples demonstrate how a centralised register can provide a more consistent view of asset information while continuing to rely on existing industry processes and responsibilities for collecting, maintaining and updating data. In each case, centralisation is used to reduce fragmentation and support access to

¹² [der-register-information-procedure.pdf](#)

¹³ [MaStR | Web Help](#)

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a common source of asset information for planning, operational and regulatory purposes.

- 3.21 The examples also highlight the importance of standardised asset information, appropriate access arrangements, governance and data responsibilities. They demonstrate how asset information can be made available to support wider system needs while protecting sensitive information where appropriate.

4. Landscape – Current and future

Section summary

This section explains how a CAR fits within the wider asset visibility and digitalisation landscape. It outlines the role of the Energy Digitalisation Framework, Domain Coordinators, common standards and shared digital infrastructure, and explains how these arrangements relate to CAR. The section also considers DESNZ's asset visibility reforms and the wider asset visibility ecosystem, before outlining the key dependencies and timelines, including RIIO-ED3, that may influence the delivery of enduring asset visibility arrangements.

CAR within the wider digitalisation landscape

- 4.1 A CAR would form part of a wider asset visibility ecosystem, which involves the collection, storage, sharing and use of asset information across the energy sector. This section explains how CAR relates to the wider digitalisation architecture established through the Energy Digitalisation Framework (EDF), including Domain Coordinators, standards governance, the Data Sharing Infrastructure (DSI) and the Consumer Consent Service (CCS). It also considers the relationship between CAR and DESNZ's asset visibility reforms, including proposals relating to installer obligations and asset registration.

The Energy Digitalisation Framework

- 4.2 As the energy sector becomes increasingly digitalised, a range of key initiatives are being delivered across government, regulators, system operators and industry. These include the DSI, CCS, FMAR and other digitalisation programmes. Together, they are laying the foundations for a smarter, more connected and increasingly interoperable energy system.
- 4.3 However, as digitalisation activity has expanded, stakeholders have highlighted increasing complexity across the landscape. A growing number of initiatives are being delivered by different organisations across the energy sector. Without effective coordination, this can create risks of fragmentation, inconsistent standards, interoperability challenges and unclear responsibilities. Addressing these challenges requires greater coordination across the digitalisation landscape.

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- 4.4 In response, DESNZ and Ofgem developed the EDF, which sets out a coordinated approach to digitalisation across the energy sector.¹⁴ The EDF provides the framework for both the delivery of key digital infrastructure and the coordination of the wider digitalised energy system. It introduces a domain-based model, supported by Domain Coordinators and shared digital infrastructure, to provide clearer governance arrangements and greater coordination across digitalisation initiatives.
- 4.5 The EDF sets out a vision for an energy system built on secure, interoperable and informed sharing of data. The Framework is intended to support more efficient system planning and operation, improve consumer participation, enable innovation and reduce duplication across digitalisation initiatives. Consistent with this vision, a future CAR would be expected to operate as part of a wider, coordinated digital ecosystem rather than as a standalone asset visibility solution.

Domain coordination, standards and interoperability

- 4.6 Under the EDF's domain-based model, related datasets and activities are grouped into defined data domains, each overseen by a designated Domain Coordinator. The purpose of Domain Coordinators is to improve coordination within and across domains, helping to address challenges relating to fragmentation, interoperability and unclear responsibilities. They are responsible for setting and maintaining domain-level standards, supporting interoperability, improving data quality and simplifying access to data. Domain coordinators are not responsible for delivering digital infrastructure, though they may take on this role when they are determined to be the appropriate body by DESNZ or Ofgem.
- 4.7 Our view is that a CAR would sit in the Behind-the-Meter asset domain, as this domain covers data relating to behind-the-meter assets, including technologies such as electric vehicle chargepoints, heat pumps, solar PV, batteries and other distributed energy resources. Understanding the location of these assets is the primary value driver behind a CAR.

Elexon: Behind-the-Meter asset domain coordinator

- 4.8 Under the EDF, Elexon has been assigned as Domain Coordinator for the Behind-the-Meter asset domain. The EDF identifies Elexon as well placed to undertake this role given its responsibilities relating to flexibility markets, the development of

¹⁴ [Energy digitalisation framework: a vision for a coordinated and connected energy system \(accessible webpage\) - GOV.UK](#)

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the FMAR platform and its role in the Smart Secure Electricity Systems (SSES) programme.

- 4.9 As Domain Coordinator, Elexon is expected to support the development and maintenance of domain-level standards, interoperability arrangements and approaches to data access across the asset domain. Under the EDF, responsibility for setting and maintaining domain-level asset data standards sits with the Domain Coordinator rather than individual platforms or services.
- 4.10 As set out in section 4.6, we consider that the CAR falls in the Behind-the Meter asset domain. It will, therefore, be incumbent upon Elexon to work with the delivery body for the CAR to ensure the data held in the CAR is standardised, consistent, and useful.
- 4.11 We expect that the data in the CAR will also be relevant to the Consumer and Core Energy System domains. As such, we will expect Elexon to work with RECCo and NESO respectively to ensure the data held in a CAR is useful to the Consumer and Core Energy System Domains.

FMAR and its relationship to CAR

- 4.12 FMAR is being developed by Elexon to provide a common approach to registering assets participating in flexibility markets. While FMAR and CAR would both operate within the wider asset visibility ecosystem, they would differ in both scope and purpose. FMAR is limited to assets participating in flexibility markets, whereas CAR would support a broader range of assets, including those that do not participate in flexibility markets, and would support a wider range of planning, operational and policy use cases. CAR would provide enduring arrangements for storing, reconciling, sharing and accessing asset information. Alignment between FMAR and CAR would be important to support interoperability and to avoid unnecessary duplication.

CAR implications

- 4.13 Any future CAR operator would therefore be expected to implement and operate in accordance with the standards established for the asset domain, while continuing to engage through domain coordination, industry governance and standards-setting processes. This approach separates standards governance from platform operation, supports a coherent standards ecosystem in alignment with the EDF.

Enabling infrastructure: Consumer Consent

- 4.14 The EDF identifies consumer consent arrangements as an important component of the wider digitalisation ecosystem. The Consumer Consent Service (CCS),

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being delivered by RECCo, is intended to provide a consistent approach to managing consumer permissions for data sharing across the energy sector.

CAR implications

- 4.15 Where access to asset information is dependent on consumer permissions, CAR should be designed to align with relevant consumer consent arrangements. This would support a consistent approach to managing consent across the energy sector and help to ensure that access to asset information is governed in a transparent and auditable manner.

Enabling infrastructure: Data sharing infrastructure

- 4.16 Alongside the domain-based model, the EDF identifies the DSI as a key component of the wider digitalisation ecosystem. The DSI is being developed by NESO to support secure, scalable and interoperable sharing of data across the energy sector, simplifying how organisations discover, access and share data across different domains.

CAR implications

- 4.17 CAR should be designed to interoperate with, and where appropriate make use of, DSI capabilities to support secure, scalable and governed sharing of asset information. This would support a coordinated approach to data sharing across the energy sector, helping to avoid duplication and enabling asset information to be accessed through common infrastructure rather than separate programme-specific arrangements.

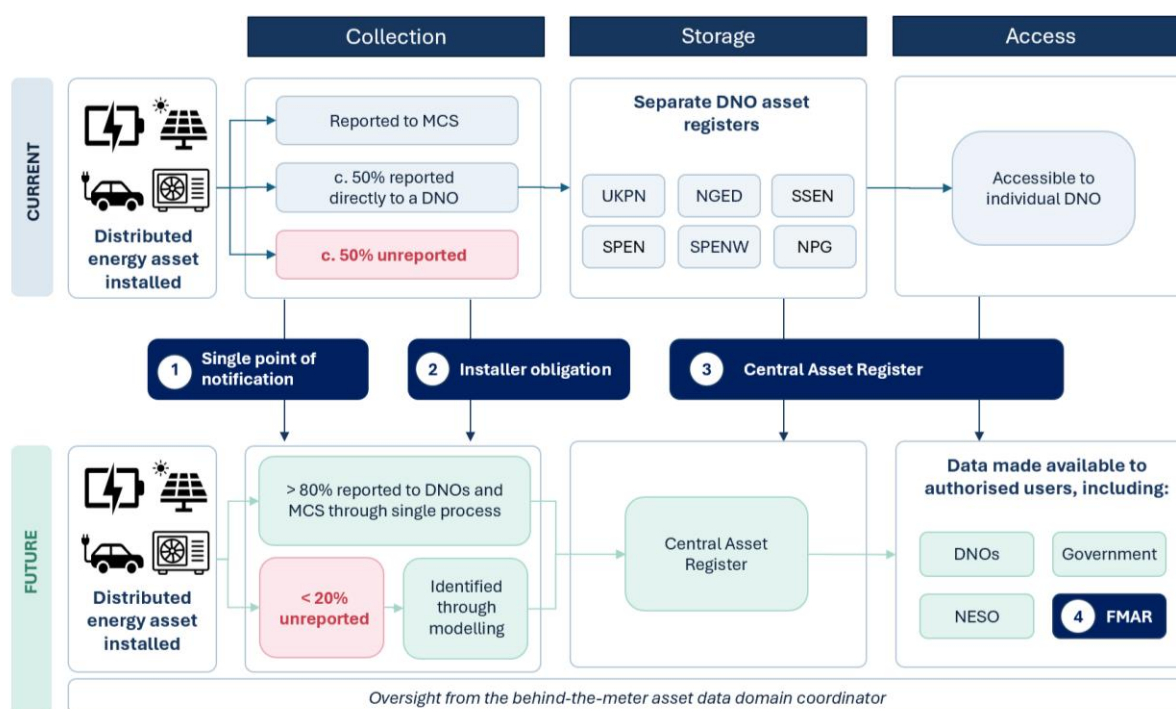
DESNZ asset visibility reforms

- 4.18 Asset visibility is not a single process or dataset. It is an end-to-end system involving multiple organisations responsible for collecting, storing, sharing and using asset information. Existing datasets are often fragmented, inconsistent and only partially overlapping. While these datasets can provide useful supplementary information, no combination of existing sources currently provides a complete picture of assets connected to the electricity network.
- 4.19 At a high level, asset visibility can be understood through three interconnected stages: collection, storage and access. Collection involves obtaining information about assets at the point of installation; storage involves maintaining accurate, trusted and interoperable records of those assets; and access involves enabling authorised organisations to use asset information for planning, operation and market participation. Effective asset visibility depends on all three stages operating together within a coordinated framework.

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4.20 The long-term objective of DESNZ's and Ofgem's asset visibility work is an end-to-end asset visibility ecosystem in which accurate information is captured once, maintained to common standards and made available to authorised users for defined purposes. Within this ecosystem, collection at the point of installation represents the foundational stage. Without accurate and complete information entering the system, subsequent arrangements for storing, reconciling, sharing and accessing asset information cannot deliver a complete or reliable view of assets across the energy system.

Figure 1. End-to-end asset visibility ecosystem



4.21 A range of organisations play a role within this landscape. Installers and DNOs are responsible for collecting and maintaining asset information. Industry organisations such as the ENA and MCS support standardisation, registration processes and wider process improvement. Government and Ofgem provide the legislative and regulatory framework, while organisations such as NESO, Elexon, flexibility market operators and other authorised users rely on asset information to support planning, operation and market participation.

Consultation Enhancing asset visibility: central asset register proposal**Table 1.** Roles of DESNZ installer obligations, CAR and FMAR

	Installer obligations (led by DESNZ)	CAR	FMAR (led by Elexon)
Primary objective	Improve asset registration rates with DNOs	Improve the completeness, consistency and accessibility of asset information	Simplify and standardise asset registration across flexibility markets
Core concept	Single point of notification	Single source of truth	Single registration point for flexibility markets
Scope	All distributed energy assets	All distributed energy assets	Assets participating in flexibility markets

4.22 Within this ecosystem, DESNZ's reforms are focused on improving the collection of asset information at installation. DESNZ has committed to seeking legislation to clarify installer obligations for registering distributed energy assets with DNOs. The objective is to improve the completeness, accuracy and consistency of asset information by establishing a clear responsibility for registration at the point of installation.

4.23 DESNZ has also committed to supporting the development of a single point of notification minimum viable product (MVP), led by the ENA and MCS. The intention is to reduce installer burden by building on existing industry processes, and to support a more consistent approach to asset registration. By simplifying the submission process and reducing duplication, the MVP is intended to increase the registration of distributed energy assets and improve the quality of information collected at source.

CAR implications

4.24 A CAR would build on these arrangements by providing enduring arrangements for storing, reconciling, sharing and accessing asset information once collected. While DESNZ's programme focuses on how asset information enters the ecosystem, CAR focuses on how that information is subsequently managed and made available to authorised users. Together, these initiatives support a coordinated asset visibility framework in which information is collected, maintained and made available through a coherent end-to-end approach.

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Timelines and dependencies

- 4.25 The sequencing of this workstream aims to ensure that decisions on enduring asset visibility arrangements can take account of developments in related initiatives while avoiding unnecessary delay to improving asset visibility.
- 4.26 Through the RIIO-ED3 business planning process, DNOs are expected to assess how their existing systems, processes and data arrangements could interface with potential centralised asset visibility models.¹⁵ DNO business plans are due to be submitted at the end of 2026, with Ofgem's Draft and Final Determinations concluding at the end of 2027.¹⁶ This work is expected to provide evidence on system changes, data preparation activities, interoperability requirements and indicative investment needs, helping to inform future implementation planning.
- 4.27 Subject to consultation responses, impact assessment evidence and wider programme alignment, Ofgem currently expects to take a final decision on the enduring asset visibility approach in Spring 2027.
- 4.28 Under NESO's current roadmap, the DSI minimum viable product (MVP) is expected to launch for trial use cases in April 2027, ahead of a wider public beta in April 2028. NESO's roadmap then envisages a scaled DSI release during 2029-2030, supporting broader adoption across the energy sector. Early trial use cases are expected to include flexibility market activities (including FMAR) and selected RIIO licence use cases, with functionality and participation expanding over time.¹⁷
- 4.29 The Consumer Consent Service, being delivered by RECCo, is expected to launch its minimum marketable product in March 2027.¹⁸ RECCo's published roadmap indicates that CCS is intended to evolve beyond its initial implementation through the addition of further datasets, participants and use cases over time, subject to future governance, policy and implementation decisions.¹⁹
- 4.30 We would expect CAR to engage closely with both DSI and CCS as these initiatives develop. This would help maximise the value of asset data by supporting secure, interoperable and coordinated access arrangements, reducing duplication and enabling asset information to be shared more effectively across the energy sector. It would also help ensure that future asset visibility requirements are reflected as these services evolve over time.

¹⁵ [Business plan guidance: electricity distribution price control \(ED3\) | Ofgem](#)

¹⁶ [ED3 Sector Specific Methodology Decision](#)

¹⁷ [Data Sharing Infrastructure \(DSI\) | National Energy System Operator](#)

¹⁸ [Consumer Consent Solution - The Retail Energy Code Company](#)

¹⁹ [Annex-C-CCS-Product-Roadmap.pdf](#)

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- 4.31 As committed, DESNZ will pursue legislation to clarify installer obligations for registering distributed energy assets with DNOs and oversee an industry asset visibility task and finish group, led by the ENA and MCS. This group aims to deliver a single point of notification MVP by the end of 2026.²⁰ These commitments are expected to inform the development of any potential future installer obligations and the wider arrangements through which asset information is collected.
- 4.32 DESNZ will continue to deliver its commitments on broader asset visibility reforms in tandem, and our close collaboration will continue as the programmes develop. Together, they contribute to a wider vision for an end-to-end asset visibility ecosystem. That vision supports alignment between asset data collection, storage and sharing arrangements, while helping to ensure overall coherence.

²⁰ [Improving the visibility of distributed energy assets: government response](#)

5. Our framework for a CAR

Section summary

This section sets out Ofgem's proposed framework for a CAR. It describes the outcomes, use cases, design principles and minimum functional requirements that a CAR should support.

The Proposed Framework

- 5.1 Building on the rationale set out in Section 3, we have developed a proposed framework for a CAR. The framework is intended to provide a consistent basis for assessing whether different delivery options can support the outcomes, use cases and capabilities required to improve asset visibility across Great Britain.
- 5.2 The framework comprises the outcomes, use cases, design principles and minimum functional requirements that a CAR should support.

Outcomes the CAR should support

- 5.3 The proposed asset visibility framework is intended to support several outcomes for a CAR. These outcomes reflect the role of a CAR as a centralised layer for storing, reconciling and sharing asset data across Great Britain.
- 5.4 We consider that a CAR should support the following outcomes:

Reduced fragmentation and duplication

- 5.5 Asset visibility arrangements should reduce the fragmentation and duplication associated with maintaining multiple disconnected datasets. A coordinated approach to storing, reconciling and sharing asset information should help establish a SSOT for asset information, providing a more complete and consistent view of assets across Great Britain.

Usable and trusted asset visibility data

- 5.6 Authorised users should be able to access and rely on asset visibility data that is sufficiently accurate, complete and consistent to support agreed use cases and decision-making. Asset data should be more trustworthy and usable because data quality, provenance and maintenance arrangements are clearer and more consistent throughout the asset lifecycle.

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Secure and governed access to asset data

- 5.7 Asset data should be accessible through secure, proportionate and auditable arrangements, including the Data Sharing Infrastructure. Access should be governed in a manner that enables legitimate use of asset data while protecting sensitive information and maintaining appropriate safeguards.

Future-ready data infrastructure

- 5.8 Asset visibility arrangements should provide a scalable and interoperable foundation that can adapt as asset volumes, users, use cases and wider digitalisation needs evolve. A CAR should be capable of supporting future energy system needs without requiring fundamental redesign.

Improved national evidence for decision-making

- 5.9 Decision makers should have access to a stronger and more consistent evidence base derived from trusted asset information. By reducing fragmentation, improving data quality and enabling appropriate access to asset information, a CAR should support more informed planning, operational, policy and market-related decisions across Great Britain.

Use cases

- 5.10 A CAR can support a range of planning, operational, policy and market-related activities. However, not all use cases provide the same degree of value or justification for intervention. To help focus assessment and delivery, we have grouped use cases into primary and secondary categories.
- 5.11 Primary use cases represent the principal drivers for establishing a CAR and provide the strongest justification for intervention to improve asset visibility. Secondary use cases are also expected to deliver value but are generally more dependent on implementation choices, interoperability with other systems and the development of wider industry arrangements. The use cases below illustrate how a CAR could support different users of asset visibility information and provide the basis for the design principles, minimum functional requirements and assessment criteria set out later in this Section.

Primary use cases

DNO – Network Planning

- 5.12 DNOs use asset information to support network planning and investment decisions, including forecasting future demand and generation, assessing network utilisation, identifying potential constraints and determining where

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network reinforcement may be required. Activities such as Distribution Network Options Assessments (DNOA) and Local Network Investment Planning (LINP) rely on an understanding of how assets are deployed across the network.

- 5.13 Consultation respondents broadly supported this use case. DNOs, suppliers, flexibility providers, trade associations and other stakeholders highlighted the importance of improved asset visibility for network planning, forecasting and investment decisions. Several respondents noted that better visibility of low carbon technologies could improve confidence in network models, support more accurate forecasting and reduce reliance on assumptions when assessing future network needs. Respondents also highlighted the importance of improvements to upstream data collection and quality.
- 5.14 DNO network planning relies on access to asset information that is accurate, complete and consistent across the network. By improving the quality and consistency of asset data and reducing fragmentation between different data sources, a CAR would help establish a SSOT for asset information, strengthening the evidence available for planning and investment decisions. This would support activities such as DNOA and LINP by helping DNOs better understand asset deployment, identify emerging network constraints and assess future reinforcement needs. This would support more efficient use of existing network infrastructure, reduce the need for unnecessary reinforcement and could help lower overall system costs for consumers through more informed network investment decisions.

NESO – National planning

- 5.15 NESO requires asset information to support national energy system planning and forecasting activities. This includes the development of the Strategic Spatial Energy Plan (SSEP), the Centralised Strategic Network Plan (CSNP), national forecasting, and wider restoration and resilience activities. These processes depend on an understanding of how assets are deployed across Great Britain and how deployment is expected to evolve over time.
- 5.16 Consultation respondents broadly supported this use case. NESO, DNOs, suppliers, flexibility providers, trade associations and other stakeholders highlighted the importance of improved asset visibility for strategic planning and forecasting. Several respondents noted that incomplete visibility of assets can increase reliance on assumptions when modelling future energy system needs, while others highlighted the importance of consistent and interoperable data for national planning processes such as SSEP and CSNP. Respondents also noted that improved visibility could support more accurate forecasting and help avoid inefficient network investment decisions.

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- 5.17 A CAR would support processes such as SSEP and CSNP by providing a more complete and consistent view of asset deployment across Great Britain. This would reduce the effort required to compile and reconcile information from multiple sources, improve confidence in system-wide modelling and forecasting, and support a more robust understanding of future energy system needs.

Local and regional planning

- 5.18 Local and regional planning increasingly plays an important role in shaping how the energy system develops. Local Authorities, NESO and DNOs use asset information to support Local Area Energy Plans (LEAPs), Regional Energy Strategic Plans (RESPs), local decarbonisation planning and wider place-based energy planning activities. These processes require an understanding of how assets are deployed across different geographic areas, including areas that span multiple DNO regions.
- 5.19 Consultation respondents broadly supported this use case. DNOs, trade associations, innovators and other stakeholders highlighted the importance of improved asset visibility for local and regional planning activities. Several respondents noted that access to more complete and consistent asset information could improve the quality of Local Area Energy Plans (LEAPs) and Regional Energy Strategic Plans (RESPs), support local decarbonisation planning and reduce the effort required to combine information across different DNO areas. Respondents also highlighted the potential value of improved asset visibility for Local Authorities and wider place-based approaches to delivering net zero.
- 5.20 A CAR would support local and regional planning by making it easier to access and use consistent asset information across geographic boundaries. This would reduce the effort required to combine data across DNO regions and support more robust LEAPs, RESPs and wider place-based energy planning activities.

Policy and regulatory insight

- 5.21 Ofgem, DESNZ and other public bodies can use information derived from asset datasets to support policy development, regulatory oversight and monitoring of energy system trends. Understanding how assets are being deployed across Great Britain can help inform policy design, assess the effectiveness of interventions and support analysis of how asset deployment is changing over time.
- 5.22 Consultation respondents highlighted the importance of improved asset visibility for policymaking, regulatory assurance and evidence-based decision-making. Several respondents noted that more complete and consistent asset information could support policy development, monitoring and evaluation, while others

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highlighted its potential value for regulatory assurance, compliance monitoring and analysis of electrification trends. Respondents also identified benefits for understanding regional patterns of asset deployment and monitoring progress towards wider energy system objectives.

- 5.23 A CAR would strengthen the evidence base for policy development, monitoring, evaluation and regulatory oversight by providing more consistent and reliable information on asset deployment across Great Britain. Improved visibility of asset uptake trends would help policymakers and regulators assess the effectiveness of interventions, identify emerging trends and determine where further action may be required. This would support more evidence-based decision-making and improve the ability to monitor progress against wider energy system objectives.

Secondary use cases

DNO and NESO – Network operations

- 5.24 DNOs and NESO use asset information to support operational activities across the energy system. Understanding where assets are connected, their characteristics and how they are distributed across the network can support operational awareness, outage planning, restoration and resilience activities. Unlike network planning, which focuses on future investment and reinforcement needs, these activities relate to the day-to-day operation and management of the network.
- 5.25 Consultation respondents generally supported this use case, although several stakeholders emphasised that static asset data alone is insufficient for network operations. DNOs, NESO and other stakeholders noted that operational decision-making often depends on dynamic data, such as real-time network conditions, asset availability and demand patterns. Respondents generally viewed improved asset visibility as an important enabler of network operations rather than a complete operational solution.
- 5.26 A CAR could support network operations by providing a more reliable asset information foundation. While static asset data is not sufficient for operational decision-making in isolation, it remains an important prerequisite for the effective use of dynamic operational data and future digital network capabilities.

Flexibility support

- 5.27 DNOs, NESO, Flexibility Service Providers (FSPs) and market operators use asset information to support the development and operation of flexibility services. Understanding the characteristics and distribution of assets can help

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organisations identify assets that may be capable of participating in flexibility services and support related planning and forecasting activities.

- 5.28 Consultation respondents generally supported this use case. Stakeholders highlighted the value of improved asset visibility for flexibility services through improved data quality, standardisation and interoperability. Several respondents considered that it could reduce barriers to asset registration and participation and support more consistent approaches across local and national flexibility arrangements. However, some questioned whether asset visibility is a primary constraint on flexibility market growth, noting that other initiatives, including FMAR, are also intended to address aspects of this challenge.
- 5.29 A CAR could support flexibility services by improving the quality and consistency of the asset information used across local and national flexibility arrangements. This could reduce friction associated with asset onboarding and participation, support more consistent registration processes and complement initiatives such as FMAR through improved asset information.

Driving innovation

- 5.30 Innovation is inherently characterised by novelty and uncertainty, making it difficult to predict exactly what future products, services and use cases may emerge from improved asset visibility. Innovators, researchers and other organisations often require access to asset information to develop new analytical tools, services and business models that support the transition to a smarter and more flexible energy system.
- 5.31 Consultation respondents broadly supported this use case. Innovators, software platforms, suppliers and other stakeholders highlighted the potential value of improved asset visibility for innovation, analytical services and the development of new products and business models. Several respondents noted that easier access to asset information could support a wider range of future use cases, including green finance, property and retrofit services, community energy initiatives and other emerging applications. Respondents also highlighted that smaller organisations can face barriers when seeking access to asset information through bespoke arrangements.
- 5.32 A CAR could support innovation by making it easier for innovators to access and use asset information across multiple regions and organisations through a more consistent and governed approach. This could reduce barriers associated with obtaining and combining asset data, particularly for smaller organisations, and support the development of new products, services and analytical tools. While many future use cases cannot yet be fully anticipated, improved access to asset information could enable a wide range of innovations.

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OEMs and installers – business planning

- 5.33 Installers and Original Equipment Manufacturers (OEMs) may also benefit from improved asset visibility. Understanding how assets are being deployed across different technologies and locations can help organisations better understand market trends, asset uptake and potential future demand.
- 5.34 A CAR could support installers and manufacturers by providing, subject to appropriate access arrangements, a more consistent view of how different technologies are being deployed across Great Britain. This would help organisations identify deployment trends, understand regional variations in asset uptake and better anticipate future demand. Improved visibility could support business planning, investment decisions and product development.

Further research opportunities

- 5.35 Academic institutions, research organisations and other analytical users may benefit from access to more consistent asset information. This could support research into technology adoption, regional trends, consumer behaviour and wider energy system developments.
- 5.36 A CAR could support research and analysis by providing a more consistent and accessible source of asset information. This would reduce the effort required to obtain, combine and reconcile data from multiple sources and improve comparability across regions and time periods. More consistent datasets could support stronger evidence and insights relating to technology adoption, regional trends, consumer behaviour and wider energy system developments.

Design principles

- 5.37 The design principles set out below describe how a CAR should be designed and delivered. The EDF states that its delivery principles should shape the design and implementation of digitalisation programmes.²¹ We have adapted these principles for a CAR, providing a common basis for assessing delivery options and supporting alignment with wider digitalisation initiatives. Consistent with the EDF, any future CAR operator would need to work alongside relevant domain coordination arrangements, including NESO's role as Domain Coordinator for energy system data.

²¹ [Energy Digitalisation Framework: A vision for a coordinated and connected energy system](#)

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Trusted and secure

- 5.38 A CAR should protect sensitive asset data through appropriate governance, security and access controls. It should support secure and auditable sharing of asset information while maintaining trust in how data is stored, accessed and used. Asset provenance, accountability and auditability should be clear throughout the asset lifecycle.

Interoperable

- 5.39 A CAR should be interoperable by design, supporting common standards, identifiers and data exchange across the energy system. It should align with related initiatives to support the efficient exchange and reuse of asset data while avoiding unnecessary duplication and fragmented data flows.

Simple, accessible and user friendly

- 5.40 A CAR should minimise unnecessary complexity and administrative burden for both data providers and users. Asset information should be accessible and usable for authorised users through proportionate and straightforward processes.

Responsive and future-proof

- 5.41 A CAR should be capable of adapting as asset volumes, users, use cases and wider digitalisation needs evolve. It should support integration with emerging initiatives and capabilities without requiring fundamental redesign.

Efficient and cost effective

- 5.42 A CAR should deliver clear user and system value while remaining proportionate to expected costs and benefits. It should avoid unnecessary duplication and make effective use of existing capabilities and infrastructure where appropriate.

Innovative and competition driven

- 5.43 A CAR should support innovation by enabling authorised users to access and make effective use of asset visibility data. This should support the development of new products, services, analytical tools and business models while maintaining appropriate governance and access arrangements.

Deliverable

- 5.44 A CAR should be practical and achievable to deliver, taking account of implementation risks, dependencies and stakeholder readiness. Delivery

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arrangements should realise benefits in a timely manner without creating unnecessary complexity or delay.

Minimum functional requirements

5.45 The minimum functional requirements set out below describe the capabilities a CAR would need to provide to support the outcomes, use cases and design principles described in this Section. They define what a CAR should be capable of doing rather than prescribing the detailed technical design or delivery model.

Store and standardise asset data

5.46 A CAR must receive asset data from relevant sources, maintain a persistent repository of asset records, and standardise those records against agreed data items, definitions and standards.

Reconcile asset records

5.47 A CAR must distinguish new assets from updates to existing assets, identify duplicate records, and maintain persistent asset identifiers or identifier mappings.

Manage data accuracy and lifecycle

5.48 A CAR must validate data, identify issues relating to accuracy and completeness, manage corrections, and support lifecycle changes caused by installation, modification, decommissioning, ownership or technical updates.

Enable governed sharing

5.49 A CAR must support traceability, access permissions, data provenance, auditability and controlled sharing through open or restricted routes depending on data sensitivity, using infrastructure such as DSI and Consumer Consent where appropriate.

Interoperate with the wider ecosystem

5.50 A CAR must support interoperability through common identifiers, agreed standards and alignment with DESNZ installer notification reforms, FMAR, DSI, Consumer Consent, Data Best Practice and relevant domain coordination arrangements.

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Enable querying and reporting

5.51 A CAR must allow authorised users to query, extract and use asset data in ways that support agreed use cases, reporting and system-value analysis.

- Q1. Do you agree with the proposed primary and secondary use cases for a CAR? Are there any use cases that should be added, removed or amended?
- Q2. Do you agree with the proposed design principles for a CAR? Are there any principles that should be added, removed or amended?
- Q3. Do you agree with the proposed minimum functional requirements for a CAR? Are there any requirements that should be added, removed or amended?

6. Delivery option considerations

Section summary

This section sets out Ofgem's proposed approach to assessing delivery options for a CAR. It explains why Elexon / FMAR and ElectraLink / EMPRIS have been shortlisted for further assessment, describes how they will be assessed against the proposed framework, and outlines the key strengths, risks and trade-offs associated with each option.

Shortlisted delivery options

- 6.1 Ofgem has shortlisted two delivery options for further assessment: an Elexon FMAR-based approach and an ElectraLink EMPRIS-based approach.
- 6.2 Both options are considered capable of delivering a CAR. However, they differ in maturity and implementation approach. ElectraLink's proposal builds on EMPRIS, an existing operational platform, whereas Elexon's proposal builds on FMAR, a platform currently under development. Furthermore, they differ in their governance arrangements, interoperability considerations, delivery dependencies and costs. This consultation therefore assesses how effectively each option can support the outcomes, use cases, design principles and minimum functional requirements set out in Section 5.

Assessment criteria

- 6.3 The assessment criteria set out below describe how Ofgem proposes to compare the shortlisted delivery options for a CAR. They provide a structured basis for assessing whether each option can deliver the outcomes, use cases, design principles and minimum functional requirements set out in Section 5, and for comparing the relative strengths and weaknesses of each delivery route.

Delivery

- 6.4 Delivery assesses the extent to which each option can deliver a CAR in a timely and practical manner, taking account of delivery maturity, implementation complexity, dependencies, stakeholder adoption and transition risk.

Technical capability

- 6.5 Technical capability assesses whether each option can support the proposed outcomes, use cases and Minimum Functional Requirements of a CAR, including the ability to receive, standardise, validate, reconcile, maintain and share asset data at scale.

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Interoperability

- 6.6 Interoperability assesses the extent to which each option can align with wider asset visibility reforms, digitalisation initiatives, common data standards and interoperability arrangements, while supporting the efficient exchange and reuse of asset data and avoiding unnecessary duplication. This includes consideration of how common standards, identifiers and data models would be developed, maintained and implemented over time.

Governance and trust

- 6.7 Governance and trust assesses whether ownership, accountability, independence, access controls, security, privacy, regulatory oversight and decision-making arrangements are sufficiently robust to support delivery and operation of a CAR.

Value for money and cost recovery

- 6.8 Value for money and cost recovery assesses whether costs are proportionate to expected benefits and whether funding and cost-recovery arrangements are credible, sustainable, aligned with those expected to benefit, and avoid unnecessary duplication or nugatory investment.

Stakeholder coordination and engagement

- 6.9 Stakeholder coordination and engagement assesses whether each option can coordinate effectively across data providers, users and delivery partners, secure stakeholder confidence and support wider adoption.

Options considered and not progressed

No intervention

- 6.10 The no intervention option has not been progressed as an enduring policy proposal. Instead, it forms the counterfactual against which the costs and benefits of introducing a CAR are assessed in the draft Impact Assessment.
- 6.11 The counterfactual assumes that existing asset visibility, digitalisation and data-sharing initiatives continue without the introduction of a CAR. The Impact Assessment therefore assesses whether introducing a CAR generates net benefits relative to this counterfactual and, if so, which delivery model provides the best value for money.

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Multiple DNO-led registers as an enduring solution

- 6.12 Maintaining multiple DNO-led registers as the enduring asset visibility solution has not been progressed for further assessment. Consultation responses demonstrated a clear preference for centralised approaches to improving asset visibility.
- 6.13 As discussed in Section 3, a decentralised approach would continue to require coordination, reconciliation and standardisation across multiple datasets and would be less effective at establishing a common and trusted view of asset information across Great Britain. While DNO-led activity will continue to play an important role in improving asset visibility, Ofgem considers that further assessment should focus on centralised delivery options.

New-build central register

- 6.14 Developing a wholly new central register, rather than building on existing or emerging industry platforms, has not been progressed for further assessment. Consultation responses emphasised the importance of building on existing capabilities where possible and avoiding unnecessary duplication.
- 6.15 Given the existence of potentially suitable existing and emerging platforms, Ofgem considers it more proportionate to assess whether those platforms can deliver the required outcomes before considering the development of a wholly new solution.

Smart DCC

- 6.16 We have also considered whether Smart DCC, including the learnings generated through the Automatic Asset Registration and Central Asset Register (AAR/CAR) innovation programme, should be assessed as a specific delivery option. The programme has provided useful evidence on asset registration, identifiers, lifecycle management and controlled access arrangements, and these learnings have informed the development of the CAR framework and assessment criteria.
- 6.17 However, Smart DCC's role in the programme was primarily focused on secure communications and supporting infrastructure rather than ownership or operation of the register itself. Consultation responses and subsequent engagement also emphasised the importance of building on existing or emerging industry platforms, with significantly stronger support expressed for FMAR and EMPRIS as potential delivery routes. Ofgem therefore considers FMAR and EMPRIS to provide a more appropriate basis for assessing delivery of a CAR.

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NESO

- 6.18 NESO was also considered as a potential delivery body. As a central entity with responsibility for a range of cross-sector planning, coordination and data-related activities, a CAR could align with several of NESO's existing and emerging roles, including its responsibilities relating to energy system planning and its role as Interim DSI Coordinator.
- 6.19 However, NESO's response to our previous consultation indicated that it did not see itself hosting a central register under a centralised delivery model. In addition, NESO is already taking on a significant number of new functions and responsibilities, creating potential delivery and prioritisation risks. Ofgem has therefore not progressed NESO for further assessment as a delivery option.

Microgeneration Certification Scheme Installation Database

- 6.20 The Microgeneration Certification Scheme Installation Database (MID), operated by MCS, was also considered as a potential delivery option. The MID is an established database containing high-quality information on MCS-certified installations.
- 6.21 However, the MID does not cover all asset types within the scope of this work, including EV infrastructure, and was established primarily to support certification rather than wider asset visibility use cases. Expanding the MID to support a broader asset visibility role would require significant changes to its scope and purpose. Consultation responses and subsequent engagement identified FMAR and EMPRIS as more credible routes for further assessment. Ofgem has therefore not progressed MID for further assessment as a delivery option.²²

Q4. Do you agree with the proposed assessment criteria for comparing delivery options?

²² A wider range of organisations, registers and delivery routes were considered during the development of Ofgem's previous consultation and subsequent policy work. These included the Energy Networks Association (ENA), Gemserv, RECCo, Embedded Capacity Registers (ECRs), Department for Transport EV charging infrastructure data and Independent Market Platforms (IMPs). These options were not progressed for further assessment due to factors including organisational remit, scope alignment, governance and accountability arrangements, implementation considerations, and the extent to which they could support the asset visibility outcomes and requirements considered in this consultation.

7. Delivery option assessment

Section summary

This section evaluates the two shortlisted delivery options for a CAR: an Elexon FMAR-based approach and an ElectraLink EMPRIIS-based approach. It assesses each option against the proposed criteria before setting out Ofgem's minded-to position on the preferred delivery body.

Option 1: Elexon (FMAR) based delivery

Company overview

- 7.1 Elexon is a not-for-profit company and the code manager for the Balancing and Settlement Code (BSC). As the Market Facilitator, Elexon operates within a regulatory framework overseen by Ofgem and has experience delivering industry-wide programmes, data services and market infrastructure.
- 7.2 Elexon is currently developing the Flexibility Market Asset Registration (FMAR) platform, which is intended to provide a common approach to registering assets participating in flexibility markets. FMAR is therefore being assessed as a potential delivery route for a CAR, with CAR-related functionality expected to be delivered through a subsequent phase of development following FMAR go-live.

Assessment Summary

- 7.3 We assessed Elexon against the six assessment criteria and awarded green RAG ratings for Technical capability and Interoperability, amber / green RAG ratings for Governance and trust and Stakeholder coordination and engagement, an amber RAG rating for Value for money and cost recovery, and a red / amber RAG rating for Delivery.

Delivery

- 7.4 Elexon's proposal is centred on extending the capabilities of FMAR to perform the role of a CAR. FMAR is a platform currently under development and scheduled for a Q3 2027 release. It is not yet operating as a mature, production-scale platform. Delivery of a CAR through this route would therefore depend on the successful delivery and operationalisation of FMAR.

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- 7.5 Evidence from the Market Facilitator and FMAR Performance Assessment Report²³ identified dependency risks and highlighted stakeholder concerns regarding delivery confidence, timelines and the pace of progress. The report also recommended that Elexon provide greater confidence that FMAR remains on a credible path to delivery by 30 September 2027.²⁴
- 7.6 Elexon has indicated that CAR-related preparatory activities including feasibility, design and governance work will be undertaken in parallel with the final delivery of FMAR, assuming a policy decision by Spring 2027. While these preparatory activities could progress independently ahead of FMAR go-live, delivery of the later stages of CAR would remain dependent on the successful implementation and operationalisation of FMAR.
- 7.7 In particular, key CAR build, integration and deployment activities would rely on capabilities developed through the FMAR programme and could not proceed in full until those capabilities are available. While parallel working may allow for some preparatory activity, it does not remove the underlying dependency on FMAR.
- 7.8 Given existing concerns surrounding FMAR's delivery timetable, our view is that pursuing both CAR and FMAR in parallel poses significant delivery risks. Given the delivery challenges and stakeholder concerns identified through the FMAR Performance Assessment Report, we consider that undertaking CAR development activity in parallel may further increase delivery complexity and programme risk.
- 7.9 Beyond the specific delivery risks associated with FMAR, Elexon is also undertaking a number of significant programmes and responsibilities across the energy sector, including FMAR, its Market Facilitator role, the Smart Data Repository and data domain coordination activities. Taken together, these activities create additional delivery dependencies, increase demands on organisational resource, and require significant coordination across multiple workstreams.
- 7.10 This is consistent with the findings of the draft Impact Assessment, which also identified Elexon's wider programme commitments, and the FMAR dependency, as factors contributing to greater uncertainty regarding the timing and implementation of a Elexon-led CAR.

²³ [Market Facilitator and Flexibility Market Asset Registration annual performance assessment: 2025 to 2026 | Ofgem](#)

²⁴ [Market Facilitator and Flexibility Market Asset Registration \(FMAR\) annual performance assessment report 2025-26](#)

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- 7.11 Given these factors, we consider there to be greater uncertainty regarding the timing and delivery of a CAR through this route. **We therefore gave Elexon a red / amber RAG rating for Delivery.**

Technical capability

- 7.12 Elexon has extensive experience developing and operating market infrastructure and data services across the electricity sector through its role as the code manager for the BSC. This includes delivery of industry-wide programmes and services such as Market-wide Half-Hourly Settlement (MHHS), the Market Facilitator programme, the Smart Data Repository and FMAR.²⁵
- 7.13 Through the development of FMAR, Elexon has undertaken detailed work on common registration processes, data definitions, asset models, data lifecycles and digital interfaces.
- 7.14 Taken together, these capabilities appear closely aligned with the minimum functional requirements identified for a CAR, including asset registration, data ingestion, standardisation, validation, lifecycle management and querying. **We therefore gave Elexon a green RAG rating for Technical capability.**

Interoperability

- 7.15 FMAR is intended to provide a common approach to asset registration across flexibility markets, reducing duplication through a single source of asset registration information. As Elexon's proposed CAR solution is centred on extending FMAR capabilities, interoperability with FMAR is inherently embedded within the delivery model.
- 7.16 Elexon's role as the designated Domain Coordinator for behind-the-meter asset data and metering data provides a strong foundation for alignment with wider market arrangements, common data standards and related digitalisation initiatives. Through this role, Elexon is expected to support the development and maintenance of asset data standards, alongside coordination and interoperability across the relevant domains. Elexon also has a coherent view of key data assets and interactions through its roles in flexibility markets and the Smart Secure Electricity Systems (SSES) programme.²⁶
- 7.17 Through the development of FMAR, Elexon has undertaken detailed work on common registration processes, data definitions, asset models, data lifecycles and interoperability requirements. This includes the development of common

²⁵ [Programmes of work run by Elexon - Elexon](#)

²⁶ [Data domain coordinator: role guidance | Ofgem](#)

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identifiers and data standards intended to support interoperability across flexibility markets. FMAR is also being developed with interoperability as a core design principle, including alignment with emerging digital infrastructure such as DSI and Consumer Consent.²⁷

- 7.18 Taken together, FMAR appears well positioned to align with wider digitalisation initiatives, common standards and related industry arrangements. Elexon's role as Domain Coordinator, together with the development of common identifiers, data standards and registration processes through FMAR, provides a strong foundation for interoperability. **We therefore gave Elexon a green RAG rating for Interoperability.**

Governance and trust

- 7.19 While Elexon is not licensed, FMAR is subject to oversight through Ofgem's Market Facilitator Governance Framework, under which delivery of FMAR forms a defined regulatory objective and is subject to ongoing performance assessment.
- 7.20 FMAR is being developed within established governance arrangements that provide defined decision-making, stakeholder oversight, performance monitoring and reporting mechanisms. The Market Facilitator Governance Framework includes formal objectives, annual performance assessments, stakeholder scrutiny and ongoing regulatory oversight, providing a clear route for accountability as FMAR moves from design into delivery and a potential governance framework for future CAR-related capabilities.²⁸ While these arrangements provide a strong foundation, further changes would be required to extend the framework to encompass CAR-specific responsibilities, objectives and oversight requirements.
- 7.21 FMAR also benefits from existing arrangements relating to access controls, governance processes, auditability and change management that are already used across Elexon's wider industry services and programmes. Taken together, these arrangements provide a governance and accountability framework capable of supporting delivery of a CAR through FMAR. However, the framework relies primarily on oversight and performance assessment mechanisms, with accountability operating largely through reputational incentives and stakeholder scrutiny rather than direct regulatory obligations on Elexon itself. **We therefore gave Elexon an amber / green RAG rating for Governance and trust.**

²⁷ [Have your say: proposed FMAR design and implementation - Flexibility Markets](#)

²⁸ [Market Facilitator Governance Framework Document 2026 to 2028 | Ofgem](#)

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Value for money and cost recovery

- 7.22 Delivery of a CAR through FMAR would build on the existing funding and governance arrangements established for the Market Facilitator programme. FMAR is funded through BSC cost recovery arrangements, with costs recovered from BSC Parties through established funding mechanisms. Elexon has proposed that CAR funding should be aligned with beneficiary-pays principles, with costs ultimately recovered from those organisations expected to derive the greatest benefit from improved asset visibility. Elexon's proposal assumes that NESO and DNOs would be the primary beneficiaries and therefore the ultimate funders of the service.
- 7.23 Ofgem agrees that beneficiary-pays principles are an important consideration when designing enduring funding arrangements. However, approaches that seek to recover costs from both DNOs and NESO may require changes across multiple regulatory, charging and governance frameworks, introducing additional implementation complexity.
- 7.24 Under an Elexon-led delivery model, the recovery of CAR costs would build on existing BSC funding arrangements but not apply to all BSC parties. Consistent with the beneficiary pays principle, our view is that a bespoke funding arrangement is justified, with costs recovered solely from DNOs via code modifications. This approach avoids the additional complexity associated with allocating costs to NESO, including any potential NESO licence changes. While the required code modifications introduce some additional complexity, this approach appears achievable.
- 7.25 We consider that an Elexon-led delivery model provides a credible route for funding and cost recovery. While not identical to Elexon's proposed funding approach, our preferred implementation route builds on the existing BSC framework and appears achievable through code modifications, albeit with some implementation uncertainty and complexity.
- 7.26 A separate consideration is the value for money of the proposal. While Elexon's proposal appears to offer a credible route for funding and cost recovery, the draft Impact Assessment identifies greater uncertainty regarding the robustness of Elexon's cost estimates and assumptions. As a result, there is greater uncertainty in the overall value-for-money assessment for this option.²⁹ **We therefore gave Elexon an amber RAG rating for Value for money and cost recovery.**

²⁹ Further detail on the cost estimates, delivery assumptions and sensitivity analysis underpinning the assessment of the Elexon FMAR-based option is provided in the accompanying draft Impact Assessment.

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Stakeholder coordination and engagement

- 7.27 Elexon has extensive experience coordinating and engaging with stakeholders across the electricity sector through its role as the code manager for the BSC and delivery of market-wide services.
- 7.28 Evidence from the Market Facilitator and FMAR Performance Assessment Report indicates that Elexon has undertaken extensive stakeholder engagement throughout FMAR development, including engagement with flexibility market operators, network companies and wider industry participants. Stakeholders generally recognised Elexon's commitment to engagement, but feedback consistently indicated uncertainty regarding how comments and concerns were assessed, the trade-offs considered and how decisions were reached. The report identified scope to improve transparency around key design decisions and stakeholder engagement outcomes.
- 7.29 We therefore consider Elexon's stakeholder engagement arrangements to be well established. However, stakeholder confidence in the effectiveness of engagement throughout FMAR development has been mixed, particularly regarding how stakeholder views have been reflected in decision-making. **We therefore gave Elexon an amber / green RAG rating for Stakeholder coordination and engagement.**

Option 2: ElectraLink (EMPRIS) based delivery

Company overview

- 7.30 ElectraLink is a for profit company wholly owned by the DNOs that provides data and digital services across the GB energy sector. It was originally established to fulfil obligations placed on DNOs under the Electricity Distribution Licence to provide, or procure the provision of, the Data Transfer Service (DTS).^{30,31} The DTS facilitates the secure exchange of information between energy suppliers, DNOs and other market participants and has operated for more than 25 years.
- 7.31 ElectraLink has subsequently developed a broader portfolio of data-sharing and digital services, including the EMPRIS platform. EMPRIS is an existing operational data management and analytics platform that combines data from multiple sources and enables analysis, reporting and data sharing across the energy sector. It is used by organisations including Ofgem, DESNZ and DNOs.

³⁰ [Electricity licensing \(from October 2025\) - Publications - Ofgem Public Register](#) – SLC 37

³¹ [DTS | Accessing Energy Data | ElectraLink](#)

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- 7.32 ElectraLink's proposal is based on expanding EMPRIS to support wider asset visibility functions, including the ingestion, reconciliation, management and sharing of asset data.
- 7.33 EMPRIS is therefore being assessed as a potential delivery route for a CAR through the expansion of its existing data management capabilities. ElectraLink considers that a significant proportion of the core capability required for a CAR already exists within EMPRIS, with delivery focused on configuration and enhancement of an existing platform rather than development of a wholly new system.

Assessment Summary

- 7.34 We assessed ElectraLink against the six assessment criteria and awarded green RAG ratings for Delivery, Technical capability, Value for money and cost recovery, and Stakeholder coordination and engagement, an amber / green RAG rating for Interoperability, and an amber RAG rating for Governance and trust.

Delivery

- 7.35 ElectraLink's proposal is centred on expanding the capabilities of EMPRIS to perform the role of a CAR. As an existing operational platform, delivery of a CAR through this route would build on established capabilities for data ingestion, management and sharing rather than depend on the successful delivery of a separate precursor service.
- 7.36 ElectraLink also benefits from established relationships and existing integrations with all DNOs through the operation of the DTS and its wider data services. This may support implementation of a CAR by reducing the effort required to establish data flows and operational arrangements with key data providers.
- 7.37 ElectraLink has also undertaken a relevant proof-of-concept, providing additional confidence in the deliverability of its proposed approach. Assuming a policy decision by Spring 2027, ElectraLink's delivery plan would be implemented in phases. First, an MVP focused on priority DNO use cases by Q4 2027; second, a target-state initial deployment by early 2028; and third, a transition to enduring operations by Q4 2028. Between the second and third phases, the platform would continue to be tested and refined.
- 7.38 Taken together, these factors provide a more direct route to implementation than options dependent on the successful delivery and subsequent enhancement of an emerging service. Whilst delivery remains dependent on regulatory decisions, governance arrangements and the quality of underlying DNO data, these risks appear manageable within the proposed delivery model.

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7.39 This is consistent with the findings of the draft Impact Assessment, which identified ElectraLink's proof-of-concept activity, detailed delivery plan and expansion of EMPRIS as factors providing greater confidence in the achievability of the proposed delivery timetable. The Impact Assessment also concluded that delivery risks associated with this route appear more manageable than those associated with options dependent on the successful delivery of a separate precursor service. **We therefore gave ElectraLink a green RAG rating for Delivery.**

Technical capability

7.40 ElectraLink has extensive experience developing and operating industry data-sharing and analytics services, including the DTS, which has operated for almost three decades. Since 2013, ElectraLink has also developed a range of data and digital services for the electricity sector, including EMPRIS.³²

7.41 Through EMPRIS, ElectraLink has experience operating large-scale energy data platforms used by organisations including Ofgem, DESNZ and DNOs. EMPRIS supports the ingestion, standardisation, linking and analysis of datasets from multiple sources and the use of common identifiers to combine information across datasets. These capabilities are closely aligned with the functions required to store, reconcile and share asset information through a CAR.

7.42 While EMPRIS is not itself an asset register, these capabilities appear closely aligned with the minimum functional requirements identified for a CAR, including data ingestion, standardisation, reconciliation, governed sharing and querying. Taken together, this provides evidence that ElectraLink possesses many of the technical capabilities required to develop and operate a CAR. **We therefore gave ElectraLink a green RAG rating for Technical capability.**

Interoperability

7.43 As a CAR, EMPRIS would be designed to align with wider energy digitalisation initiatives and avoid the creation of a standalone asset visibility silo. Through EMPRIS, ElectraLink already operates a platform that enables users to access, combine and analyse energy-related datasets from multiple sources.

7.44 An EMPRIS-based CAR would be expected to interoperate with FMAR and other related initiatives through agreed standards, identifiers and interfaces. This would support the exchange and reuse of asset information across the wider

³² [Decision on ElectraLink's proposed expansion of its electricity-related activities | Ofgem](#)

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digitalisation architecture while allowing different services to perform distinct functions.

- 7.45 EMPRIS has existing integration capabilities with DNO systems, NESO and wider industry platforms. EMPRIS already supports the exchange, linking and analysis of data across multiple datasets through a common platform and has experience combining information from different sources using common identifiers, agreed data structures and data-management processes. This provides evidence of an existing capability to support interoperability across organisations and datasets.
- 7.46 ElectraLink has proposed that an EMPRIS-based CAR would be supported by arrangements intended to promote interoperability as the platform evolves. This includes an Asset Visibility Design Authority (AVDA) responsible for supporting the implementation of common data models, taxonomy and integration principles, and for promoting alignment with relevant standards and wider industry initiatives. Under the Energy Digitalisation Framework, responsibility for setting and maintaining asset data standards would continue to sit with the relevant Domain Coordinator for behind-the-meter asset data, Elexon.
- 7.47 ElectraLink proposes that the AVDA would include representation from DNOs, Ofgem, DESNZ and key dependency bodies, including Elexon in its role as Domain Coordinator. This would provide a mechanism for coordinating implementation decisions and supporting alignment between CAR, FMAR and other related initiatives as the wider asset visibility ecosystem develops.
- 7.48 Taken together, an EMPRIS-based CAR, supported by the proposed AVDA, appears well positioned to align with FMAR, Data Best Practice and wider digitalisation initiatives through common interfaces, governance arrangements and alignment with industry data standards. However, unlike an FMAR-based CAR, this approach would require interoperability between two separate platforms through agreed standards and interfaces rather than being delivered through a single integrated service. While this appears achievable, it introduces additional integration requirements and dependencies between platforms. **We therefore gave ElectraLink an amber / green RAG rating for Interoperability.**

Governance and trust

- 7.49 ElectraLink operates within established industry governance arrangements through its role in delivering the DTS. ElectraLink has operated the DTS for almost three decades under arrangements established pursuant to Standard Licence

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Condition (SLC) 37 obligations placed on DNOs, providing an established governance precedent for the delivery of industry data services.³³

- 7.50 ElectraLink has proposed a governance model based on the introduction of a DNO licence condition to maintain a CAR, which ElectraLink would deliver through a multi-party service agreement. The proposed model benefits from an identifiable implementation route and an established accountability precedent through the SLC 37 and DTS model.
- 7.51 A dedicated CAR licence condition in the Electricity Distribution Licence could provide the core accountability framework for CAR, establishing obligations on DNOs relating to delivery, performance, funding and reporting. Proportionate assurance and reporting arrangements could provide additional visibility of delivery, performance and compliance whilst retaining accountability through the licence framework. Where appropriate, existing governance and oversight arrangements could be utilised to support coordination and accountability before establishing new structures.
- 7.52 However, accountability would continue to operate indirectly through DNO licence obligations rather than through direct regulation of ElectraLink itself. Ofgem's oversight would therefore operate through the DNOs that commission the service, rather than through direct obligations placed on the delivery body. Whilst these arrangements could strengthen visibility of delivery and performance, this approach provides a less direct route for regulatory accountability and oversight than a model where obligations sit directly with the organisation responsible for delivering the service. **We therefore gave ElectraLink an amber RAG rating for Governance and trust.**

Value for money and cost recovery

- 7.53 ElectraLink already operates a range of funding models across its wider business, including cost-recovery services delivered through the DTS, user-pays arrangements and commercial services. This demonstrates that funding arrangements can be tailored to the purpose and governance of a particular service.
- 7.54 ElectraLink has proposed that CAR should be funded by DNOs through RIIO-ED3 arrangements, with accountability remaining with DNOs through licence obligations whilst ElectraLink delivers the service. This is broadly analogous to the arrangements used for the DTS, where obligations sit with DNOs through

³³ Standard Licence Condition 37 places obligations on DNOs to establish or procure, operate and maintain the Data Transfer Service. ElectraLink has delivered the DTS on behalf of DNOs under these arrangements for almost three decades.

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Standard Licence Condition 37 and are delivered by ElectraLink as a common service provider.

- 7.55 Ofgem agrees that a DNO-funded approach provides an identifiable implementation route through existing RIIO-ED3 arrangements and is broadly aligned with beneficiary-pays principles. DNOs are expected to derive significant benefits from improved asset visibility and would also play a central role in enabling CAR through data provision, governance and delivery arrangements.
- 7.56 Ofgem also considers that there may be merit in distinguishing between the core CAR service required to deliver the Minimum Functional Requirements and any future optional services developed beyond the agreed CAR scope. A cost-recovery approach appears appropriate for the core CAR service, whilst alternative funding approaches could be considered for future optional services where consistent with the governance, access and policy objectives of the CAR.
- 7.57 ElectraLink's proposal therefore provides a credible funding route and a relatively direct approach to cost recovery through existing regulatory arrangements. In addition, delivery through an existing operational platform may create efficiencies by leveraging existing infrastructure, industry relationships and operational capabilities rather than requiring wholly new delivery arrangements.
- 7.58 The draft Impact Assessment concluded that there is greater confidence in the robustness of ElectraLink's cost estimates and a lower risk of material cost escalation. As a result, there is greater confidence in the overall value-for-money assessment for this option.³⁴ **We therefore gave ElectraLink a green RAG rating for Value for money and cost recovery.**

Stakeholder coordination and engagement

- 7.59 ElectraLink has extensive experience coordinating with stakeholders across the energy sector. As Secretariat for the DCUSA and operator of the DTS, ElectraLink maintains regular engagement with DNOs, electricity suppliers and other market participants.³⁵
- 7.60 ElectraLink also works closely with Ofgem, DESNZ and NESO through the provision of industry data services and support for market processes. These relationships provide experience coordinating stakeholders across industry, government and regulated entities and include many of the organisations expected to provide, use or interact with CAR data. ElectraLink has also

³⁴ Further detail on the cost estimates, delivery assumptions and sensitivity analysis underpinning the assessment of the ElectraLink EMPRIIS-based option is provided in the accompanying draft Impact Assessment.

³⁵ [About DCUSA - DCUSA](#)

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undertaken engagement with DNOs and wider stakeholders as part of the development of its CAR proposal.

- 7.61 Taken together, these relationships provide evidence of established stakeholder coordination and engagement across a wide range of organisations relevant to delivery of a CAR. Whilst ElectraLink's historic focus has been on data-sharing and market processes rather than asset registration itself, its existing relationships with many of the organisations expected to provide and use CAR data provide a strong foundation for implementation. **We therefore gave ElectraLink a green RAG rating for Stakeholder coordination and engagement.**

Option assessment summary

Table 2. Ofgem's assessment of the shortlisted delivery options against the proposed assessment criteria. The RAG ratings illustrate the relative strengths and weaknesses identified for each option across the six assessment categories.

RAG Analysis	Elexon	ElectraLink
Delivery	Red / Amber	Green
Technical Capability	Green	Green
Interoperability	Green	Amber / Green
Governance and trust	Amber/Green	Amber
Value for money and cost recovery	Amber	Green
Stakeholder coordination and engagement	Amber / Green	Green

- 7.62 Both options appear capable of delivering a CAR and perform strongly against the Technical Capability criterion. However, the assessment indicates differences in delivery confidence, governance arrangements, stakeholder engagement and value for money and cost recovery.
- 7.63 Elexon's FMAR-based proposal benefits from strong technical capability, interoperability and alignment with wider standards and digitalisation initiatives. However, delivery of a CAR would depend on the successful delivery and subsequent enhancement of FMAR, and its proposed funding model introduces additional implementation complexity.

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- 7.64 ElectraLink's EMPRIS-based proposal benefits from an existing operational platform, established industry integrations and a relatively direct funding route. These factors provide greater confidence in the underlying delivery assumptions, cost estimates and implementation approach, although questions remain regarding governance, accountability and regulatory oversight.
- 7.65 Based on the evidence currently available, Ofgem's minded-to position is that an ElectraLink EMPRIS-based approach appears to provide the strongest overall route for delivering a CAR. The option performs strongly across the majority of the assessment criteria and benefits from being built on an existing operational platform with established industry integrations and delivery arrangements.
- 7.66 This emerging view is also consistent with the findings of the accompanying draft Impact Assessment, which concluded that ElectraLink represents the stronger value-for-money proposition when costs, delivery confidence, implementation risk and sensitivity analysis are considered together.
- 7.67 Ofgem recognises that questions remain regarding governance, accountability and regulatory oversight, and is seeking stakeholder views on these issues through this consultation. Consultation responses, impact assessment evidence and any further information received will inform Ofgem's final assessment and implementation approach.

- Q5. Do you agree with how the proposed assessment criteria have been applied to the shortlisted delivery options and Ofgem's emerging assessment of those options? If not, what changes would you suggest and why?
- Q6. Are there any measures that could mitigate the identified risks or shortcomings of either option?
- Q7. Do you think any of the assessment criteria should carry greater weight than others? If so, which criteria should be prioritised and why?
- Q8. Are there any wider considerations, risks or dependencies that Ofgem should take into account when assessing the shortlisted delivery options?

8. Conclusion and next steps

Section summary

This section summarises Ofgem's proposed approach to improving asset visibility through a CAR and explains the next steps following this consultation. It sets out how consultation responses, impact assessment evidence and further engagement will inform Ofgem's final assessment, implementation approach and decision on the future delivery of asset visibility arrangements.

- 8.1 Ofgem considers that there is a strong justification for intervention to improve asset visibility. Together, Ofgem and DESNZ are progressing complementary reforms intended to improve how asset information is collected, stored, shared and used across the energy system. While DESNZ's reforms are focused on improving the collection of asset data at source, this consultation has considered the role that a CAR could play in providing enduring arrangements for storing, reconciling, sharing and accessing that information once collected.
- 8.2 This consultation seeks views on Ofgem's proposed framework for a CAR, the assessment criteria used to compare delivery options, and our minded-to position that an ElectraLink EMPRIS-based approach appears to provide the strongest overall route for delivering a CAR.
- 8.3 Alongside this consultation, Ofgem is publishing a draft impact assessment and invites stakeholder feedback on the evidence and assumptions it contains. Consultation responses, impact assessment evidence and any further stakeholder engagement will inform Ofgem's final assessment of the shortlisted delivery options and implementation approach. Ofgem currently expects to publish a final impact assessment alongside that decision.
- 8.4 Subject to consultation responses, impact assessment evidence and wider programme alignment, Ofgem currently expects to take a final decision on the enduring asset visibility approach in Spring 2027. Following the decision, further work will be required to develop detailed delivery, governance and regulatory arrangements and support implementation of the chosen approach.
- 8.5 Ofgem's objective remains to deliver a proportionate, interoperable and future-ready asset visibility solution that complements upstream collection reforms and supports a more complete, consistent and trusted view of assets across Great Britain. In doing so, it should help establish a SSOT for asset information and support more consistent planning, operational and policy decisions across the energy system.

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Send us your feedback.

We believe that consultation is at the heart of good policy development. We are keen to receive your comments about this consultation. We would also like to get your answers to these questions:

- Do you have any comments about the quality of this document?
- Do you have any comments about its tone and content?
- Was it easy to read and understand? Or could it have been better written?
- Are its conclusions balanced?
- Did it make reasoned recommendations?
- Do you have any further comments?

Please send your feedback to stakeholders@ofgem.gov.uk.

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Appendix 1. Consultation Questions

Section 5: Our framework for a CAR

- Q1. Do you agree with the proposed primary and secondary use cases for a CAR? Are there any use cases that should be added, removed or amended?
- Q2. Do you agree with the proposed design principles for a CAR? Are there any principles that should be added, removed or amended?
- Q3. Do you agree with the proposed minimum functional requirements for a CAR? Are there any requirements that should be added, removed or amended?

Section 6: Delivery option considerations

- Q4. Do you agree with the proposed assessment criteria for comparing delivery options?

Section 7: Delivery option assessment

- Q5. Do you agree with how the proposed assessment criteria have been applied to the shortlisted delivery options and Ofgem's emerging assessment of those options? If not, what changes would you suggest and why?
- Q6. Are there any measures that could mitigate the identified risks or shortcomings of either option, particularly in relation to governance, accountability and regulatory oversight?
- Q7. Do you think any of the assessment criteria should carry greater weight than others? If so, which criteria should be prioritised and why?
- Q8. Are there any wider considerations, risks or dependencies that Ofgem should take into account when assessing the shortlisted delivery options?

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Appendix 2. Glossary

CAR: Central Asset Register. A proposed centralised capability for storing, reconciling, sharing and providing access to asset information across Great Britain, supporting planning, operational and policy use cases.

CCS: Consumer Consent Service. A service being developed by RECCo to provide a consistent approach to managing consumer permissions for data sharing across the energy sector.

CER: Consumer Energy Resource, energy technologies that are owned or used by consumers to generate, store, manage, or consume energy. For example, electric vehicles, heat pumps, battery energy storage systems, and solar PV.

CSNP: Centralised Strategic Network Plan. NESO's strategic plan for electricity transmission network development across Great Britain

DER: Distributed Energy Resource, small-scale energy generation and storage systems which are connected to the distribution networks.

DESNZ: The Department for Energy Security and Net Zero which covers the Government's energy portfolio.

DNO: Distribution Network Operator, licensed companies that own and operate the network of cables, transformers and towers that bring electricity from the national transmission network to businesses and homes.

DNOA: Distribution Network Options Assessment. A DNO process used to identify and assess options for addressing future network needs and constraints.

Domain Coordinator: An organisation assigned under the Energy Digitalisation Framework to support coordination, standards development, interoperability and data quality within a specific data domain.

DSI: Data Sharing Infrastructure. An Ofgem policy for a mechanism to securely share standard data between energy sector organisations. This develops and delivers the Energy Digitalisation Taskforce recommendations for a Digital Spine.

EDF: Energy Digitalisation Framework. A framework developed by DESNZ and Ofgem to provide a coordinated approach to digitalisation across the energy sector, including domain coordination, common standards and shared digital infrastructure.

EMPRIS: An operational data management and analytics platform developed by ElectraLink that combines, links and analyses energy-related datasets from multiple sources.

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ENA: Energy Networks Association the trade body representing energy networks in the UK and Ireland.

FMAR: Flexibility Market Asset Registration, delivered by Elexon, seeking to create a common system for registering energy assets into flexibility markets, ensuring that information about assets can flow to both market operators and participants. It will allow assets to be registered once for access to multiple flexibility markets.

FSP: Flexibility Service Provider is an umbrella term for the party who takes delivery and other contractual risks when providing flexibility services. This may be the asset owners, asset operators, aggregators, Virtual Lead Parties, and Demand Side Response Service Providers.

LEAP: Local Area Energy Plan. A locally led planning process used to assess future energy needs and infrastructure requirements within a geographic area.

LINP: Local Network Investment Planning. A DNO planning process used to assess future network investment requirements.

MCS: Microgeneration Certification Scheme, a UK quality assurance scheme that assesses the quality, performance, and safety of small-scale energy products such as solar panels, heat pumps, and wind turbines.

MID: MCS Installations Database, a central online database that holds records of every MCS certified small-scale, low carbon installation in the UK since 2010.

NESO: National Energy System Operator (formerly known as Electricity System Operator, ESO) is an independent public body responsible for the strategic planning of Great Britain's electricity and gas networks and operating the electricity system. Designated as the Independent System Operator and Planner under the Energy Act 2023, its purpose is to help facilitate the country's transition to net zero, while ensuring the energy system remains reliable, efficient, and secure.

OEM: Original Equipment Manufacturer. A company that manufactures equipment or technologies used within the energy sector.

RECCo: Retail Energy Code Company. The organisation responsible for managing and operating the Retail Energy Code and associated services, including the Consumer Consent Service.

RESP: Regional Energy Strategic Plan. A regional planning process intended to support coordinated energy system development across a wider geographic area.

SSEP: Strategic Spatial Energy Plan. NESO's strategic plan for the future location and development of energy infrastructure across Great Britain.

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SSoT: Single Source of Truth, authoritative data repository or register that is considered the definitive source for given data elements, ensuring consistency and accuracy across all systems.

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Appendix 3. Related publications

- [Enhancing asset visibility: Distribution Network Operator options | Ofgem](#)
- [Improving the visibility of distributed energy assets: call for evidence | GOV.UK](#)
- [Improving the visibility of distributed energy assets: government response | GOV.UK](#)
- [Energy digitalisation framework: a vision for a coordinated and connected energy system \(accessible webpage\) | GOV.UK](#)
- [Data domain coordinator: role guidance | Ofgem](#)
- [Energy digitalisation governance: architectural coordination | Ofgem](#)
- [Clean Power 2030 Action Plan | GOV.UK](#)
- [Clean flexibility roadmap | GOV.UK](#)
- [ED3 Sector Specific Methodology Decision](#)
- [Business plan guidance: electricity distribution price control \(ED3\) | Ofgem](#)
- [Market Facilitator Governance Framework Document 2026 to 2028 | Ofgem](#)
- [Market Facilitator and Flexibility Market Asset Registration annual performance assessment: 2025 to 2026 | Ofgem](#)
- [Decision: flexibility market asset registration | Ofgem](#)
- [Governance of the Data Sharing Infrastructure | Ofgem](#)
- [Data Sharing Infrastructure \(DSI\) | National Energy System Operator](#)
- [Consumer Consent decision | Ofgem](#)
- [Consumer Consent Solution | Retail Energy Code Company](#)
- [Data Best Practice guidance | Ofgem](#)
- [Future Energy Scenarios \(FES\) | National Energy System Operator](#)

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Appendix 4. Privacy policy

Personal data

The following explains your rights and gives you the information you are entitled to under the General Data Protection Regulation (GDPR).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally) not the content of your response to the consultation.

1. The identity of the controller and contact details of our Data Protection Officer

The Gas and Electricity Markets Authority is the controller, (for ease of reference, “Ofgem”). The Data Protection Officer can be contacted at dpo@ofgem.gov.uk

2. Why we are collecting your personal data

Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

3. Our legal basis for processing your personal data

As a public authority, the GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest. i.e. a consultation.

4. With whom we will be sharing your personal data

N/A

5. For how long we will keep your personal data, or criteria used to determine the retention period.

Your personal data will be held for one year following the consultation closing.

6. Your rights

The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- know how we use your personal data
- access your personal data
- have personal data corrected if it is inaccurate or incomplete
- ask us to delete personal data when we no longer need it
- ask us to restrict how we process your data
- get your data from us and re-use it across other services
- object to certain ways we use your data

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- be safeguarded against risks where decisions based on your data are taken entirely automatically
- tell us if we can share your information with 3rd parties
- tell us your preferred frequency, content and format of our communications with you
 - to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at <https://ico.org.uk/> or telephone 0303 123 1113.

7. Your personal data will not be sent overseas.

8. Your personal data will not be used for any automated decision making.

9. Your personal data will be stored in a secure government IT system.

10. More information For more information on how Ofgem processes your data, view our [Ofgem privacy policy](#).